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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LEWIS, CHERYL RENE A

ART UNIT	PAPER NUMBER
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2177

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/804,672

Applicant(s)

REED, DAVID

Examiner

Cheryl Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-28 are presented for examination.

DRAWINGS

2. The applicants formal drawings filed on March 9, 2001 have been approved by the Draftsperson.

INFORMATION DISCLOSURE STATEMENT

3. The information disclosure statements filed on September 8, 2003, paper no. 7 complies with the provisions of MPEP § 609. They have been placed in the application file, and the information referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1, 5, 7, 8, 9, 13, 15, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jammes et al. (Pat. No. 6,484,149 B1, filed October 10, 1997, hereinafter Jammes); Cohen et al. (Pat. No. 5,903,898, filed June 4, 1996, hereinafter Cohen); Zaiken et al. (Pat. No. 5,907,848, filed March 14, 1997, hereinafter Zaiken); and Yokota et al. (Pat. No. 5,592,660, filed July 13, 1992, hereinafter Yokota).
6. Regarding Claims 1 and 9, Jammes teaches a system and methods for viewing product information, and methods for generating web pages.

The method and associated system for viewing product information, and methods for generating web pages as taught or suggested by Jammes includes:

a production database (figure 2, element 116 'Product Information Database', col. 8, line 47) comprising one or more tables (figure 2 depicts element 116, Product Information Database, comprising three types of tables, element 204 'Products Table', element 206 'Group Table', and element 202 Relationships Table'. col. 10, lines 10-17) each storing records of production data (col. 9, lines 60-64) generated by a transaction processing (col. 8, lines 60-67); a rule that specifies a data selection criteria (Abstract, paragraph 2, lines 16-22, col. 31, lines 37-42) and storing updated records (col. 9, lines

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63 and 64, col. 11, lines 13 and 14); and an informational database (figure 1, element 128, 'Traffic Analysis Database') comprising one or more tables storing records of informational data (col. 48, lines 42-65, col. 51, lines 19-21)

However, Jammes does not expressly teach a log writer storing log entries into a log file with at least one log entry generated for each transaction committed.

Cohen teaches a log writer (Abstract, lines 7-9,) storing log entries into a log file with at least one log entry (col. 5, lines 45-58) generated for each transaction committed (col. 5, lines 58-67); analyzing log entries of log files (col. 2, lines 47-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Jammes with Cohen's method of a log writer storing log entries into a log file with at least one log entry generated for each transaction committed because Cohen's method enables a system for selectively disabling the logging of database operations during the execution of database processes or the creation of database objects, accordingly changes made to the database through data manipulation statements or queries can include a statement that the change to be executed is not to be logged, if an operation is to be logged, a log buffer stores the information about the changes and a log writer background process writes the operation entries to disk (Abstract, lines 1-9).

However, Cohen does not expressly teach a log monitor.

Zaiken teaches a log monitor (col. 6, lines 26-36, col. 11, lines 27 and 28, '...during normal log monitor operation, it monitors records for updating all templates...').

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine log file means of Cohen's method with the log monitor method of Zaiken because Zaiken's log monitor method enables a normal log monitor operation to monitor records for updating all transaction templates used in the database log or journal, a templates determine whether each record or entry in the journal represent pare of a transaction (col. 11, lines 27-30).

However, Zaiken does not expressly a decision support system.

Yokota teaches a decision support system (Abstract, lines 1-4, 'A database system including a transaction database system processing device for executing a transaction database process and a decision support database system processing device for executing a decision support process').

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Zaiken with Yokota's method of a decision support system because Yokota's method comprises a decision support database device and transaction database system for retaining a transaction database created and updated by transactional processes for a first and second database storage device each provided with a decision support database device and each for retaining a first and a second decision database for use in a decision support process (Abstract, lines 3-9).

7. Regarding Claims 5 and 13, the limitations of these claims have been noted in the rejection above. They are therefore rejected as set forth above.

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8. Regarding Claims 7 and 15, the limitations of these claims have been noted in the rejection above. In addition, Yokota teaches the means which essentially comprise the same means as job control (col. 5, lines 39-61).

9. Regarding Claims 8 and 16, the limitations of these claims have been noted in the rejection above. In addition, Zaiken teaches a log monitor (col. 11, lines 27 and 28, '...during normal log monitor operation, it monitors records for updating all templates...') cache (col. 6, line 9).

10. Regarding Claim 17, Jammes teaches computer-readable storage medium holding code for performing the method of claim 9 (col. 3, lines 49-56).

11. Claims 2, 4, 10, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jammes et al. (Pat. No. 6,484,149 B1, filed October 10, 1997, hereinafter Jammes); Cohen et al. (Pat. No. 5,903,898, filed June 4, 1996, hereinafter Cohen); Zaiken et al. (Pat. No. 5,907,848, filed March 14, 1997, hereinafter Zaiken); and Yokota et al. (Pat. No. 5,592,660, filed July 13, 1992, hereinafter Yokota) as applied to claims 1 and 9 above, and further in view of Dovich et al. (Pat. No. 6,308,168 B1 filed, February 9, 1999, hereinafter Dovich).

12. Regarding Claims 2 and 10, the limitations of these claims has been noted in the rejection above. In addition, Jammes, Cohen, Zaiken, and Yokota do not expressly teach metadata.

Dovich teaches metadata (Abstract, lines 1-4, col. 8, lines 20-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the methods of Jammes, Cohen, Zaiken, and Yokota

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with the Dovich's metadata method because Dovich's metadata method enables a data presentation module presenting panels that are driven by metadata to allow a user to configure the presentation of information from a computer database system, the data presentation module is customized for the user's environment by configuring the metadata tables upon initial installation of the data presentation module software (Abstract, lines 1-6).

13. Regarding Claims 4 and 12, Dovich teaches metadata comprises at least one parameter selected from the group of program code for performing the data selection (col. 7, lines 27-50).

14. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jammes et al. (Pat. No. 6,484,149 B1, filed October 10, 1997, hereinafter Jammes); Cohen et al. (Pat. No. 5,903,898, filed June 4, 1996, hereinafter Cohen); Zaiken et al. (Pat. No. 5,907,848, filed March 14, 1997, hereinafter Zaiken); and Yokota et al. (Pat. No. 5,592,660, filed July 13, 1992, hereinafter Yokota) as applied to claims 1 and 9 above, and further in view of Miller, Jr. et al. (Pat. No. 6,446,074 B1, filed March 20, 2000, hereinafter Miller).

15. Regarding Claims 3 and 11, the limitations of these claims have been noted in the rejection above. In addition, Jammes, Cohen, Zaiken, and Yokota do not expressly teach a database builder.

Miller teaches a database builder (Abstract, lines 1-3) generating the data selection criteria (Abstract, lines 3-5, col. 2, lines 9-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the methods of Jammes, Cohen, Zaiken, and Yokota with the database builder method of Miller because Miller's database builder enables a system for defining, building, and maintaining database files that includes a memory operable to store a plurality of databases, the plurality of databases have a relationship among one another, a database builder has access to the plurality of databases stored in the memory, the database builder is capable of learning the relationships among the plurality of databases, a user interface provides access for a user to the plurality of databases according to the database builder (col. 1, lines 38-47).

16. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jammes et al. (Pat. No. 6,484,149 B1, filed October 10, 1997, hereinafter Jammes); Cohen et al. (Pat. No. 5,903,898, filed June 4, 1996, hereinafter Cohen); Zaiken et al. (Pat. No. 5,907,848, filed March 14, 1997, hereinafter Zaiken); and Yokota et al. (Pat. No. 5,592,660, filed July 13, 1992, hereinafter Yokota) as applied to claims 1 and 9 above, and further in view of Torbjornsen et al. (Pat. No. 5,555,404, filed May 26, 1995, hereinafter Torbjornsen).

17. Regarding Claims 6 and 14, the limitations of these claims have been noted in the rejection above. In addition, Jammes, Cohen, Zaiken, and Yokota do not expressly teach log means (Abstract, lines 12-14) comprising replicas of at least one table of records (col. 4, lines 50-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the methods of Jammes, Cohen, Zaiken, and Yokota

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with Torbjornsen's method of log means comprising replicas of at least one table of records because Torbjornsen's method enables a database server architecture having multiple nodes, each node with its own central processing unit, primary and secondary memory for storing database tables, every database table is fragmented over the system nodes, and the number of fragments of each table corresponds to the number of nodes in the system, each table fragment represents a portion of the records in a table, the records in a database table are allocated to the various fragments as evenly as possible so as to spread the data storage and transaction handling load as evenly as possible among the system's nodes (col. 4, lines 53-63).

18. Claims 18-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over; Salkewicz et al. (Pat. No. 5,970,502, filed April 23, 1996, hereinafter Salkewicz); Cohen et al. (Pat. No. 5,903,898, filed June 4, 1996, hereinafter Cohen); Althoff et al. (Pat. No. 6,374,252 B1, filed October 16, 1997, hereinafter Althoff); Matsuzaki (Pat. No. 6,609,099 B1, filed August 1, 2000); Zaiken et al. (Pat. No. 5,907,848, filed March 14, 1997, hereinafter Zaiken); and Miller, Jr. et al. (Pat. No. 6,446,074 B1, filed March 20, 2000, hereinafter Miller).

19. Regarding Claims 18 and 23, Salkewicz teaches a source database (col. 6, lines 20 and 21, '...server 90 will act as the source database...'), a data selection criteria for records stored in the source database (col. 6, lines 66 and 67, col. 7, lines 1-5), and a destination database (6, lines 21 and 22, '...and server 92 will act as the destination database...') storing a new record into the destination database (col. 6, lines 66 and 67, col. 7, lines 1-5, col. 10, lines 37-42) with the data stored in the destination database

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comprising at least a partial subset of the source database (col. 6, lines 66 and 67, col. 7, lines 1-5, col. 10, lines 55-65).

However, Salkewicz does not expressly teach executing operations expressed in a data manipulation language against a database with at least one operation constituting a commit operation that completes each database transaction.

Cohen teaches executing operations expressed in a data manipulation language (Abstract, lines 4 and 5, col. 5, lines 28-37) against a database (Abstract, lines 1-3, col. 4, lines 60-64, col. 6, lines 14-21) with at least one operation constituting a commit operation (col. 5, lines 58-63) that completes each database transaction (col. 6, lines 35-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Salkewicz with Cohen's method of executing operations expressed in a data manipulation language against a database with at least one operation constituting a commit operation that completes each database transaction because Cohen's method enables selectively disabling the logging of database operations during the execution of database processes or the creation of database objects, accordingly changes made to the database through data manipulation statements or queries can include a statement that the change to be executed is not to be logged, if the operation is to be logged, a log buffer stores the information about the changes and a log writer background process writes the operation entries to disk (Abstract, lines 1-9).

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However, Cohen does not expressly teach a database engine executing operations expressed in a data manipulation language and metadata describing a database.

Althoff teaches a database engine executing operations expressed in a data manipulation language (col. 7, lines 25-35) and metadata describing a database (col. 7, lines 21-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Cohen with Althoff's method of a database engine executing operations expressed in a data manipulation language and metadata describing a database because Althoff's method enables modeling of object-oriented database structures and dynamic searches, a user creates, edits, and manipulates a user's object database (the method dynamically translates into a set of relational database structures) to create, edit, and manipulate objects for that object database and creates, edits, and manipulates queries to be applied to that object database (the method dynamically translates into queries to be applied to those relational database structures) (col. 3, lines 12-24).

Althoff does not expressly teach a current rule set with each rule comprising business logic.

Matsuzaki teaches a current rule set with each rule (col. 3, lines 61-65, col. 4, lines 26) comprising business logic (Abstract, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Althoff with Matsuzaki's method of a

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current rule set with each rule comprising business logic because Matsuzaki's method enables describing a program language, the data input meaning is detected and software for this data processing is automatically applied and prepared, various types of worksheets corresponding to the business logic terms and data input positions are stored in a business data file, when an operation unit is operated and data is input to the data input position, the input data is stored as rule setting data, when application data corresponding to the rule setting data is input through the operation unit, a business logic applying section determines the use software in accordance with the corresponding business logic term (Abstract, lines 1-15).

Matsusaki does not expressly teach monitoring a log; generating a log entry in a log for each transaction committed to a database, each log entry identifying an affected record and including transactional data; a record generation module and an evaluation module evaluating the transaction identified in each log entry; and select transactional data from the log entry of each transaction meeting the selection criteria.

Zaiken teaches monitoring a log (col. 6, lines 26-36); generating a log entry (col. 5, lines 36-40) in a log for each transaction committed to a database (col. 2, lines 19-25), each log entry identifying (col. 5, lines 55-60) an affected record (col. 4, lines 45-62, col. 9, lines 16-41 and 55-64) and including transactional data (Abstract, lines 7-12); the means which essentially comprise the same means as a record generation module (col. 6, lines 26-49) and an evaluation module evaluating the transaction identified (figure 3, element 24, col. 6, line 4 and 10-13) in each log entry (col. 5, lines 55-60); and

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select transactional data from the log entry of each transaction meeting the selection criteria (col. 5, lines 57-67, col. 6, lines 14-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of Matsusaki with Zaiken's method of monitoring a log; generating a log entry in a log for each transaction committed to a database, each log entry identifying an affected record and including transactional data; an evaluation module evaluating the transaction identified in each log entry; and select transactional data from the log entry of each transaction meeting the selection criteria because Zaiken's method enables a log monitor method, wherein a normal log monitor operation to monitor records for updating all transaction templates used in the database log or journal, a templates determine whether each record or entry in the journal represent pare of a transaction (col. 11, lines 27-30).

Zaiken does not expressly teach a database builder.

Miller teaches a database builder (Abstract, lines 1-3) generating the data selection criteria (Abstract, lines 3-5, col. 2, lines 9-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the methods of Zaiken with the database builder method of Miller because Miller's database builder enables a system for defining, building, and maintaining database files that includes a memory operable to store a plurality of databases, the plurality of databases have a relationship among one another, a database builder has access to the plurality of databases stored in the memory, the database builder is capable of learning the relationships among the

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plurality of databases, a user interface provides access for a user to the plurality of databases according to the database builder (col. 1, lines 38-47).

20. Regarding Claims 19-21, 24-26, and 28, the limitations of these claims have been noted in the rejection above. They are therefore rejected as set forth above.

21. Regarding Claims 22 and 27, Zaiken teaches the transaction data comprises information selected from the group comprising a timestamp (col. 7, lines 29 and 30), a table identifier (col. 5, lines 46-51), record identifier (col. 9, lines 16-41), operation type (col. 2, lines 25-56), and undo information (col. 3, lines 35-40).

CONCLUSION

22. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

NAME OF CONTACT

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Lewis whose telephone number is (703) 305-8750. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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(703) 746-5651 (Use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper/amendment be faxed directly to them on occasions.).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Cheryl Lewis
Patent Examiner
November 20, 2003



SRIRAMA CHANNAVALA
PRIMARY EXAMINER